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(54) **COMPOSITIONS AND METHODS OF NUCLEIC ACID-TARGETING NUCLEIC ACIDS**

(71) Applicant: **CARIBOU BIOSCIENCES, INC.**, Berkeley, CA (US)

(72) Inventors: **Andrew Paul May**, San Francisco, CA (US); **Rachel E. Haurwitz**, Kensington, CA (US); **Jennifer A. Doudna**, Berkeley, CA (US); **James M. Berger**, Baltimore, MD (US); **Matthew Merrill Carter**, North Granby, CT (US); **Paul Donohoue**, Berkeley, CA (US)

(73) Assignee: **Caribou Biosciences, Inc.**, Berkeley, CA (US)

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(58) **Field of Classification Search**
None
See application file for complete search history.

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Primary Examiner — Jim Ketter
(74) *Attorney, Agent, or Firm* — Gary R. Fabian; Barbara G. McClung

(57) **ABSTRACT**

This disclosure provides for compositions and methods for the use of nucleic acid-targeting nucleic acids and complexes thereof. Genome engineering can refer to altering the genome by deleting, inserting, mutating, or substituting specific nucleic acid sequences. The altering can be gene or location specific. Genome engineering can use nucleases to cut a nucleic acid thereby generating a site for the alteration. Engineering of non-genomic nucleic acid is also contemplated.

12 Claims, 73 Drawing Sheets